filing date of this application. This deposit of the Inbred Maize Line PH3AV will be maintained in the ATCC depository, which is a public depository, for a period of 30 years, or 5 years after the most recent request, or for the effective life of the patent, whichever is longer, and will be replaced if it becomes nonviable during that period. Additionally, Applicant has satisfied all the requirements of 37 C.F.R. §§1.801 - 1.809, including providing an indication of the viability of the sample. Applicant imposes no restrictions on the availability of the deposited material from the ATCC; however, Applicant has no authority to waive any restrictions imposed by law on the transfer of biological material or its transportation in commerce. Applicant does not waive any infringement of his rights granted under this patent or under the Plant Variety Protection Act (7 USC 2321 et seq.). U.S. Plant Variety Protection of Inbred Maize Line PH3AV has been applied for under Application No. 200100022.

IN THE CLAIMS

Please cancel claims 45 and 46.

Please amend claims 1, 3, 4, 5, 6, 8, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 30, 31, 32, 33, 35, 36, 37, 40, 41, 42, 43, 47, 48, and 49.

- 1. (Amended) Seed of maize inbred line designated PH3AV, representative seed of said line having been deposited under ATCC Accession No. PTA-4346.
- 3. (Amended) the maize plant of claim 2, wherein said plant is manipulated to be male sterile.
- 4. (Amended) A tissue culture from the plant of claim 2.
- 5. (Amended) A tissue culture according to claim 4, cells or protoplasts of the tissue culture being from a tissue selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.
- 6. (Amended) A maize plant regenerated from the tissue culture of claim 4, capable of expressing all the morphological and physiological characteristics of inbred line PH3AV,

representative seed of which have been deposited under ATCC Accession No. PTA-4346.

- 8. (Amended) The method of claim 7 wherein said different inbred parent maize plant is the female parent.
- (Amended) The maize plant, or parts thereof, of claim 2, wherein the plant, or parts thereof, further comprises a transgene.
- 12. (Amended) A method for producing a maize plant comprising crossing the maize plant of claim 11 with a second plant of another maize line.
- 13. (Amended) The maize plant, or parts thereof, produced by the method of claim 12.
- 14. (Amended) A maize plant, or parts thereof, wherein at least one ancestor of said maize plant is the maize plant of claim 2, said maize plant expressing a combination of at least two PH3AV traits which are not significantly different from PH3AV traits when determined at the 5% significance level and when grown in the same environmental conditions, said PH3AV traits selected from the group consisting of: a relative maturity of 84 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, flowering, ear mold tolerance, early growth, grain yield, silage yield, silage quality, starch content of silage, and energy content of silage; and wherein said at least two PH3AV traits were derived from PH3AV and not from other plants utilized in the development of said maize plant.
- 16. (Amended)The method of claim 15 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.
- 17. (Amended) A malze plant, or parts thereof, produced by the method of claim 15 wherein the method comprises 2 or less crosses to a plant other than PH3AV or itself.

- 18. (Amended) The maize plant, or parts thereof, of claim 2, further comprising a single gene conversion.
- 19. (Amended) The maize plant of claim 18, wherein the single gene conversion is a dominant allele.
- 20. (Amended) The maize plant of claim 18, wherein the single gene conversion is a recessive allele.
- 21. (Amended) A maize plant, or parts thereof, having all the physiological and morphological characteristics of inbred line PH3AV, representative seed of said line having been deposited under ATCC accession No. PTA-4346.
- 22. (Amended) The maize plant of claim 21, wherein said plant is manipulated to be male sterile.
- ,23. (Amended) A tissue culture cells from the plant of claim 21.
- 24. (Amended) A tissue culture according to claim 23, cells or protoplasts of the tissue culture being from a tissue selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.
- 25. (Amended) A maize plant regenerated from the tissue culture of claim 23, capable of expressing all the morphological and physiological characteristics of inbred line PH3AV, representative seed of which have been deposited under ATCC Accession No. PTA-4346.
- 27.(Amended) The method of claim 26 wherein said different inbred parent maize plant is the female parent.
- 30. (Amended)The maize plant, or parts thereof, of claim 21, wherein the plant, or parts thereof, further comprises a transgene.

- (Amended) A method for producing a maize plant comprising crossing the maize plant of claim 30 with a second plant of another maize line.
- 32. (Amended). The maize plant, or parts thereof, produced by the method of claim 31.
- 33. (Twice Amended) A PH3AV-derived maize plant, or parts thereof, wherein at least one ancestor of said PH3AV-derived maize plant is the maize plant of claim 2, and wherein the pedigree of said PH3AV-derived maize plant is within 2 or less crosses to a plant other than PH3AV or itself.
- 35. (Amended) The method of claim 34 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.
- 36. (Amended) A maize plant, or parts thereof, produced by the method of claim 34 wherein the method comprises 2 or less crosses to a plant other than PH3AV or itself.
- 3\(\text{(Twice Amended) A process for producing inbred PH3AV, representative seed of which have been deposited under ATCC Accession No. PTA-4346, comprising:
 - (a) planting a collection of seed comprising seed of a hybrid, one of whose parents is inbred PH3AV said collection also comprising seed of said inbred;
 - (b) growing plants from said collection of seed;
 - (c) identifying inbred parent plants;
 - (d) selecting said inbred parent plant;
 - controlling pollination through selfing, which preserves the homozygosity of said inbred parent plant; and
 - (f) collecting morphological and/or physiological data so that said inbred parent may be identified as inbred PH3AV.
 - (Amended) A method for producing a PH3AV-derived maize plant, comprising:
 - (a) crossing inbred maize line PH3AV, representative seed of said line